

POST GRADUATE DIPLOMA IN CLINICAL
CARDIOLOGY (PGDCC)

Term-End Examination

June, 2009

00433

MCC-007 : CARDIO-VASCULAR RELATED DISORDERS

Time : 2 hours

Maximum Marks : 60

Note :

- (i) There will be multiple choice type of questions in this examination which are to be answered in OMR Answer Sheets.
- (ii) All questions are *compulsory*.
- (iii) Each question will have four options and only **one** of them is correct. Answers have to be marked in figures in the appropriate rectangular boxes corresponding to what is the correct answer and then blacken the circle for the same number in that column by using HB or lead pencil and not by ball pen in OMR Answer Sheets.
- (iv) If any candidate marks more than one option it will be taken as the wrong answer and no marks will be awarded for this.
- (v) Erase completely any error or unintended marks.
- (vi) There will be 60 questions in this paper and each question carries equal marks.
- (vii) There will be no negative marking for wrong answers.
- (viii) No candidate shall leave the examination hall at least for one hour after the commencement of the examination.

1. Total amount of insulin secreted per 24 hours by the pancreas is estimated as _____.
(1) 6 - 10 units (2) 20 - 50 units (3) 18 - 32 units (4) 100 - 200 units
2. In Gestational diabetes - once the pregnancy is over _____.
(1) Diabetic state disappears in all of them (2) Diabetic state persists in few
(3) Diabetic state persists in majority (4) Diabetic state does not disappear
3. In OGTT, Impaired Glucose Tolerance means :
(1) Fasting > 126 mg and Post Prandial < 200 mg
(2) Fasting > 126 mg and Post Prandial > 140 mg
(3) Fasting > 110 mg and Post Prandial > 140 mg
(4) Fasting < 126 mg and Post Prandial > 140 and < 200 mg
4. Hypoglycemia is defined as _____.
(1) Blood glucose < 60 mg with or without sign and symptom
(2) Blood glucose < 60 mg with only sign - symptoms
(3) Blood glucose < 110 mg with symptoms
(4) Blood glucose < 100 mg and no symptom
5. Diabetic keto-acidosis is highest among :
(1) Type II DM with surgery (2) Type II DM in elderly
(3) Type I DM (4) Type II DM with infection
6. Focus of Management in diabetic keto-acidosis are the following except :
(1) Correction dehydration
(2) Correction of electrolyte imbalance
(3) Correction of acidosis with bicarbonate
(4) Correction of blood sugar with insulin
7. Which is not included in the diagnostic criteria for Hyperosmolar non-ketotic coma ?
(1) Plasma > 600 mg (2) Serum osmolality > 330 mOsm/kg
(3) Absence of ketones (4) Serum bicarbonate < 20 mEq/L
8. Major cause of death in diabetics is :
(1) Cardiovascular (2) Renal
(3) Diabetic Ketoacidosis (4) Hypoglycemia on treatment
9. Which statement is more likely with cardiovascular disease in diabetics ?
(1) Male suffers more than female (2) Female suffers more than male
(3) Male and female suffer equally (4) Male suffers more after 70 yrs than female

10. Which of the following statement is most appropriate in microvascular complications of diabetics, complications are more with ?
- (1) Severity of DM (2) Duration of DM
(3) Poor control of DM (4) Delayed use of insulin therapy
11. Which one is the result of microvascular complication in DM ?
- (1) Acute myocardial infarction (2) Transient ischaemic attack
(3) Peripheral vascular disease (4) Microalbuminuria
12. Which statement is wrong with diabetic nephropathy ?
- (1) Persistent proteinuria > 500 mg/day
(2) End stage renal disease develops by 5 - 7 yrs duration
(3) Retinopathy is present virtually in all patients
(4) Haematuria and RBC casts in urine are common
13. The best choice of antihypertensive therapy in diabetics is :
- (1) ACEI and ARB (2) Ca-channel blockers
(3) β -blockers (4) Diuretics
14. The target BP in elderly diabetic and hypertensive patient should be :
- (1) < 130/80 mmHg (2) < 160/90 mmHg
(3) < 140/90 mmHg (4) < 160/80 mmHg
15. Sweetening agent which contains no calorie is :
- (1) Sorbitol (2) Xylitol (3) Saccharin (4) Fructose
16. Which is not true with metformin use in diabetics ?
- (1) Increase peripheral glucose utilization (2) Reduce gluconeogenesis
(3) Increase appetite (4) Reduce glucose output from liver
17. Which is not true with acarbose ?
- (1) Relatively weak anti-diabetic (2) Natural choice of treatment in elderly
(3) Chances of hypoglycemia is less (4) Cannot be used in renal failure
18. Primary Failure to OHA is due to :
- (1) Marked pancreatic insufficiency and insulin resistance
(2) Inadequate doses of OHA
(3) Increase secretion of glucagon
(4) Renal failure

19. Choice of drug in obese diabetics is :
- (1) Pioglitazone (2) Insulin (3) Metformin (4) Glibenclamide
20. If the FBS < 150 mg and PPBS < 250 mg, the initial treatment is :
- (1) Diet and weight reduction alone (2) Metformin alone
(3) Small dose of insulin (4) Small dose of glimepiride
21. The third generation sulphonylurea is _____.
- (1) Glimepiride (2) Chlorpropamide
(3) Glibenclamide (4) Glipizide
22. The major mechanism of action of sulphonylurea is :
- (1) Insulin sensitizer
(2) Insulin secretion from beta cell
(3) Impairs absorption of carbohydrate from the gut
(4) Potentiate the action of insulin by delaying its degradation
23. Thiazolidenediones are in the group of _____.
- (1) Sulphonylureas (2) Biguanides
(3) Insulin sensitizers (4) Alpha glucosidase inhibitors
24. Pioglitazone is contraindicated in :
- (1) Hepatitis (2) Myopathy (3) Gastritis (4) Ischaemic heart disease
25. Hypoglycaemia cannot be treated with sugar if the patient is on _____.
- (1) Metformin (2) Glimepiride (3) Rosiglitazone (4) Acarbose
26. Regular insulin is a _____.
- (1) Long acting insulin (2) Short acting insulin
(3) Intermediate acting insulin (4) Biphasic insulin
27. Biphasic insulin is a _____.
- (1) NPH insulin
(2) Lispro insulin
(3) Combination of Lispro and soluble Insulin
(4) Combination of soluble insulin and NPH insulin
28. Glycosylated haemoglobin (HbA1C) indicates average glycemic value of :
- (1) 6 months (2) 9 months (3) 1 month (4) 3 months

29. The requirement of Insulin in diabetic pregnancies as compared to non-gravid state _____.
- (1) Decreased (2) Increased
(3) Remains same (4) Initially increased then decreased
30. The treatment goal of blood sugar in diabetic pregnancies _____.
- (1) FBS 60 - 90mg% and PPBS < 140mg%
(2) FBS 100 - 120mg% and PPBS < 200 mg%
(3) FBS < 140 mg% and PPBS < 200 mg%
(4) FBS around 126mg% and PPBS around 180mg%
31. If both parents are diabetic, chances of having diabetes to their offsprings in their life is :
- (1) 100% (2) 75% (3) 50% (4) 25%
32. In diabetic pregnancies—mostly :
- (1) Foetal growth is increased (2) Foetal growth is decreased
(3) Foetal growth is unchanged (4) Intrauterine growth retardation
33. Find out the wrong statement :
- (1) B.P. starts falling during 1st trimester, maxm fall in mid-pregnancy and returns to pre-gestational level before term
(2) Pulse pressure increased due to greater fall in diastolic BP
(3) There is a reduction in systemic vascular resistance
(4) B.P. falls due to more excretion of Na^+ through kidneys due to oestrogen effect
34. Anticoagulant that crosses the placenta is :
- (1) Heparin (2) LMWH (3) Warfarin (4) All the above
35. Which one of the following inotropes is not adrenergic against ?
- (1) Dopamine (2) Dobutamine
(3) Nor-epiniphrine (4) Amrinone
36. Ominous signs in pre - eclamsia except :
- (1) Proteinuria > 2 gm/day (2) Rising level of s. creatinine
(3) B.P. > 160/110 mmHg (4) High platelet count

37. Find the correct statement :

- (1) In pregnancy with hypertension - antihypertensive drug is prescribed only for maternal safety
- (2) Anti hypertensive drug in hypertensive pregnancies can improve perinatal outcome
- (3) Antihypertensive drug in hypertensive pregnancies does not adversely effect the uteroplacental blood flow
- (4) No Antihypertensive drug can cause teratogenic effect

38. In hypertensive urgencies in pregnancy the best choice of drug is :

- (1) Nifedipine - sublingually
- (2) Sodium nitropruside IV
- (3) Hydraliazine IV
- (4) Enalapril IV

39. All Beta-Blockers in pregnancy can cause intrauterine growth retardation, except :

- (1) Metoprolol
- (2) Labetalol
- (3) Atenolol
- (4) Propranolol

40. PIH (Pregnancy Induced Hypertension) is called if B.P. rises _____ to Hypertensive level :

- (1) During 1st trimester
- (2) Before 20 wks
- (3) After 20 wks
- (4) Just before delivery

41. In primary pulmonary hypertension - which of the following statement is wrong :

- (1) Pregnancy should be avoided
- (2) If there is pregnancy, early termination is indicated
- (3) In case of term pregnancy - effective delivery preferred
- (4) Pregnancy may be considered safe under close monitoring

42. Which of the following cannot be the cause of high output failure ?

- (1) Pregnancy
- (2) Hypertension
- (3) Cor pulmonale
- (4) Glumerulonephritis

43. Which one is thiazide diuretic ?

- (1) Torsemide
- (2) Ethacrinic acid
- (3) Bumetanide
- (4) Metalozone

44. Following are the potassium sparing agent except :

- (1) Amiloride
- (2) Triamterine
- (3) Hydrochlorthiazide
- (4) Spironolactone

45. Which of the following valvular lesion is poorly tolerated in pregnancy ?

- (1) Moderate MR
- (2) Moderate AR
- (3) Moderate PS
- (4) Moderate Ms

46. The regurgitant fraction with heart disease in pregnancy :
- (1) Increases in MR
 - (2) Increases in AR and MR
 - (3) Unchanged or decreased in AR and MR
 - (4) Increases in AR
47. With prostatic valve which of the following statement is wrong ?
- (1) In pregnancy risk of thromboembolism is high
 - (2) Warfarin in 1st trimester may lead to embryopathy
 - (3) Pregnancy leads to dilutional anaemia, so chances of thromboembolism decreases
 - (4) Heparin is safe in pregnancy as it does not cross placenta
48. Following are absolute indication to avoid pregnancy except in :
- (1) Atrial septal defect
 - (2) Eisenmenger's Syndrome
 - (3) Primary pulmonary hypertension
 - (4) Congestive Cardiac Failure
49. Following are statements in relation to peripartum cardiomyopathy. Find out the incorrect statement :
- (1) CCF develops in last month of pregnancy or within 5 months after delivery
 - (2) Absence of demonstrable cause of heart failure
 - (3) No demonstrable heart diseases prior to pregnancy
 - (4) Documented systolic or diastolic dysfunction
50. Which is not true in peripartum cardiomyopathy ?
- (1) More common in Primi than multiparous woman
 - (2) Less common with age < 30 yrs
 - (3) More with twin pregnancies
 - (4) More with Pre-eclampsia
51. Which is not a part of Virchow's triad of DVT ?
- (1) Venostasis
 - (2) Vessel wall inflammation
 - (3) Hypertension
 - (4) Hypercoagulability
52. The commonest presenting feature of pulmonary embolism is :
- (1) Acute chest pain
 - (2) Acute Right heart failure
 - (3) Haemoptysis, fever and compitation
 - (4) Acute unexplained dyspnoea with sinus tachycardia.

53. Find out the wrong statement :
- (1) In PE, there may be ventilation-perfusion mismatch
 - (2) A normal perfusion scan virtually excludes the diagnosis of PE
 - (3) Presence of multiple perfusion defect strongly favours diagnosis of PE.
 - (4) Ventilation-perfusion lung scan (VQ Scan) is diagnostic of PE.
54. Pulmonary artery pressure at sea level is :
- (1) 18-25/6-10 mmHg
 - (2) 25-35/0-5 mmHg
 - (3) 18-25/10-12 mmHg
 - (4) 25-35/10-12 mmHg
55. Most sensitive sign for PAH is :
- (1) Accentuated P_2
 - (2) Presence of Lt. Parasternal pulsation
 - (3) Signs of Right heart failure
 - (4) Pulsation of pulmonary artery
56. Statin should be used in :
- (1) all Type II diabetes with or without cardiovascular disease
 - (2) diabetes with known coronary artery disease only
 - (3) diabetes with TIA only
 - (4) diabetes with hyperlipidaemia only.
57. Diabetic patient may develop diplopia due to paralysis of extra ocular muscle. Which cranial nerve is more likely to involve :
- (1) 4th nerve
 - (2) 3rd nerve
 - (3) 6th nerve
 - (4) optic nerve
58. Find the correct statement :
- (1) Insulin contains two polypeptide chains, α and β
 - (2) Insulin contains three polypeptide chains, α , β and c peptide.
 - (3) Pro-insulin is released from betacell and cleaved at serum to insulin.
 - (4) α and β chains of insulin are connected with one disulfide bond.
59. Epidemiologically the cause of hyperinsulinaemia is :
- (1) Hypertension
 - (2) Hyperlipidaemia
 - (3) Obesity
 - (4) High carbohydrate diet
60. For OGTT, WHO has recommended-glucose :
- (1) 50 gm
 - (2) 75 gm
 - (3) 100 gm
 - (4) 25 gm

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